Application No.: 10/589,436

Attorney Docket No. 10-108-US

CLAIM AMENDMENTS

The following listing of the claims replaces all prior versions, and listings, of the claims in the application.

(Currently Amended) A stock shape for machining, which is composed of a 1. solidified extruded product of a resin composition comprising 30 to 94 % by mass of a thermoplastic resin (A) having a melting point of at least 220°C or a glass transition temperature of at least 170°C, 5 to 40 % by mass of a carbon precursor (B) having a volume resistivity of 102 to 10¹⁰ Ω·cm and a carbon content of 80 to 97% by mass, and 1 to 30 % by mass of a conductive filler (C) which is carbon fiber having a volume resistivity lower than $10^2 \,\Omega$ cm, and used in secondarily forming into a formed product of a desired shape by machining such as cutting, drilling, shearing and combinations thereof,

wherein the stock shape for machining is a plate having a thickness of 4 to 70 mm or a round bar having a diameter of 4 to 70 mm and has a surface resistivity of 10^5 to $10^{13}~\Omega/\Box$. and

the solidified extruded product is produced by an extrusion and solidification method using an extrusion forming machine, to the tip of which an extrusion die and a forming die are coupled, and subjected to a heat treatment for at least 30 minutes at a temperature of from 150°C to a temperature capable of retaining the solidified state after the extrusion and solidification, thereby residual stress is removed,

and further wherein a length of burr observed is not longer than 30 µm, said length of burr being determined by a measuring method, in which a flat plate sample of the solidified extruded product, which has a thickness of 10 mm, is subjected to drilling under conditions that a drill having a drill diameter of $800~\mu m$ is used, the number of revolutions of the drill is 8.000

revolutions/min, and the feed speed of the drill is 200 mm/min, and the length of burr produced around a hole is evaluated with an electron microscope.

and wherein the thermoplastic resin (A) is a mixture composed of a combination of poly(ether ether ketone)/poly(ether imide), poly(ether imide)/poly(phenylene sulfide), poly(ether ether ketone)/poly(phenylene sulfide) or poly(ether ether ketone)/poly(ether imide)/ poly(phenylene sulfide).

- (Canceled).
- 3-7. (Canceled).
- 8. (Currently Amended) The stock shape for machining according to claim 7 1, wherein the mixture of at least two thermoplastic resins thermoplastic resin (A) is a mixture containing poly(ether ether ketone) and poly(ether imide) in proportions of 40:60 to 95:5 in terms of a mass ratio.
- 9. (Currently Amended) The stock shape for machining according to claim 7 1, wherein the mixture of at least two thermoplastic resins thermoplastic resin (A) is a mixture containing poly(phenylene sulfide) and poly(ether imide) in proportions of 40:60 to 95:5 in terms of a mass ratio.
- (Currently Amended) The stock shape for machining according to claim 7 1,
 wherein the mixture of at least two thermoplastic resins thermoplastic resin (A) is a mixture

containing poly(ether ether ketone) and poly(phenylene sulfide) in proportions of 40:60 to 95:5 in terms of a mass ratio.

11. (Currently Amended) The stock shape for machining according to claim 71, wherein the mixture of at least two thermoplastic resins thermoplastic resin (A) is a mixture containing poly(ether ether ketone), poly(phenylene sulfide) and poly(ether imide) in proportions of 50:50 to 95:10 in terms of a mass ratio of the total mass of the poly(ether ether ketone) and poly(phenylene sulfide) to poly(ether imide).

12-13. (Canceled).

- 14. (Previously Presented) The stock shape for machining according to claim 1, wherein the carbon fiber is polyacrylonitrile based carbon fiber, pitch based carbon fiber or a mixture thereof.
- 15. (Previously Presented) The stock shape for machining according to claim 1, wherein the resin composition comprises 60 to 85 % by mass of the thermoplastic resin (A), 12 to 25 % by mass of the carbon precursor (B) and 3 to 15 % by mass of the conductive filler (C).

16-18. (Canceled).

19. (Withdrawn) A process for producing a stock shape for machining, which comprises extruding and solidifying a resin composition comprising 30 to 94 % by mass of a thermoplastic resin (A), 5 to 40 % by mass of a carbon precursor (B) having a volume resistivity

Application No.: 10/589,436

Attorney Docket No. 10-108-US

of 10^2 to 10^{10} Ω cm and 1 to 30 % by mass of a conductive filler (C) having a volume resistivity lower than 10^2 Ω cm through the following Steps 1 to 3:

- (1) a step of feeding the resin composition to an extrusion forming machine, to which a die assembly composed of an extrusion die (i) and a forming die (ii) equipped with a cooling device at an exterior thereof and a passage in communication with a passage of the extrusion die at an interior thereof is coupled;
- (2) a step of extruding the resin composition into a desired shape from the extrusion die (i) while melting the resin composition by the extrusion forming machine; and
- (3) a step of cooling an extruded product in a molten state extruded from the extrusion die(i) in the interior of the forming die (ii) to solidify the extruded product,

thereby obtaining an extruded product having a thickness or diameter exceeding 3 mm.

- 20. (Withdrawn) The production process according to claim 19, which comprises subjecting the solidified extruded product to a heat treatment for at least 30 minutes at a temperature of from 150°C to a temperature capable of retaining the solidified state after the extrusion and solidification.
 - (Canceled).